## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A circuit arrangement, comprising:
- a low temperature coolant circuit configured to cool charge air in a motor vehicle having a supercharger,
- a single-unit, integrated charge-air and coolant radiator <u>cooled by coolant flowing</u> through a passage of the coolant circuit, and
- a temperature sensor provided at a coolant outlet of the radiator or at a short distance downstream, wherein the temperature sensor is configured to measure a coolant outlet temperature.
- 2. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the coolant flow rate is controlled as a function of the determined coolant temperature.
- 3. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is a thermostat.
- 4. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is integrated into a plastic part which serves to carry coolant.
- 5. (Previously Presented) The circuit arrangement as claimed in claim 4, wherein the plastic part is produced by means of plastic injection-molding.
- 6. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the low temperature coolant circuit is connected to a main coolant circuit, so that there is an exchange of coolant.
- 7. (Previously Presented) The circuit arrangement as claimed in claim 6, wherein a control valve is arranged in the low temperature coolant circuit.
- 8. (Currently Amended) The circuit arrangement as claimed in claim 7, wherein the control valve is arranged upstream of a low temperature coolant radiator or upstream of the <u>charge-air</u>

## and coolant radiator.

- 9. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the coolant traveling from the charge-air/coolant radiator is fed upstream of a pump to a main coolant circuit.
- 10. (Currently Amended) A method for operating a circuit arrangement, comprising: circulating coolant through a low temperature circuit configured to cool charge air in a motor vehicle having a supercharger,

providing a single-unit, integrated charge-air and coolant radiator <u>cooled by coolant</u> flowing through a passage of the coolant circuit,

determining the temperature of coolant at an outlet of the radiator or at a short distance downstream from the outlet, and

controlling a coolant flow rate through the radiator.

- 11. (Previously Presented) The method as claimed in claim 10, wherein the coolant flow rate through the radiator is controlled taking into consideration a rotational speed and/or load, in particular of a drive engine of the motor vehicle, a traveling speed of the motor vehicle, an outside temperature and/or an ambient pressure.
- 12. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is integrated with the coolant outlet of the radiator.
- 13. (Previously Presented) The circuit arrangement as claimed in claim 1, further comprising a coolant circuit configured to cool coolant for an engine of the motor vehicle.
- 14. (Previously Presented) The circuit arrangement as claimed in claim 1, further comprising a low temperature coolant radiator configured to cool coolant supplied to the single-unit, integrated charge-air and coolant radiator.
- 15. (Previously Presented) The method as claimed in claim 10, wherein the step of determining the temperature of the coolant at the outlet of the radiator is performed by using a sensor integrated with the coolant outlet of the radiator.

- 16. (Previously Presented) The method as claimed in claim 10, further comprising the step of circulating coolant for an engine of the motor vehicle through a second circuit.
- 17. (Previously Presented) The method as claimed in claim 10, wherein the step of circulating coolant through the low temperature circuit comprises circulating the coolant through a low temperature coolant radiator configured to cool the coolant supplied to the single-unit, integrated charge-air and coolant radiator.